



Dart Hawkesbury  
1270 Aberdeen St Hawkesbury, ON K6A 1K7 Canada  
Tel (613) 632-5200  
Fax 613 632-5246

## Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
PO040612	MEC002-VU	13	1	Net 30	M2024T3S.090	2024-T3 .090 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A- 250/4 OR AMS-QQ-A- 250/4 OR AMS 4037 OR ASTM B209 receive sf				144	8/24/2018	144		S103237	Stock	8/16/2018	\$ 8.16 / sf	1		\$1,175.04	Metaux Castle
										<b>Total:</b>		<b>144</b>								<b>\$1,175.04</b>	

Plex 8/17/2018 10:32 AM dart.Tollis Andrew



Castle Metals®

A. M. Castle & Co.

PACKING SLIP/  
CERTIFICATE OF CONFORMANCE


Page 1 of 1


Shipment No:3675394

<b>Ship From:</b> A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		<b>Sold To:</b> DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	<b>Ship To:</b> DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN	<b>Deliver To:</b> DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA
<b>Date Shipped</b> 15-AUG-18	<b>F.O.B.</b> ORIGIN	<b>Freight Terms</b> Prepaid	<b>Carrier</b> MANITOULIN	<b>BOL No</b> 3675394-2

Shipment Details

<b>Order No</b> 5214668	<b>Line No</b> 4	<b>Item No</b> 770960.MO	<b>Description</b> 0.0900.SH.2024.T3.ALUMINUM.BARE.48.0000.144.0000 - PROTECTIVE VINYL COATING SPECIFICATIONS: AMS-QQ-A-250/4
<b>Purchase Order No</b> 40612	<b>Part Number</b>	<b>Ordered Qty</b> 3.00 PCS	<b>Invoice Qty</b> 3.00 PCS
<b>Details</b> ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS			

<b>Delivery No.</b> 122017066	<b>Mill/Source</b> KAISER ALUMINUM	<b>Heat Number</b> 	<b>Mech Id</b> 3	<b>Width (IN)</b>	<b>Length (IN)</b>	<b>Shipped Qty(LBS)</b> 188.6792
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We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material returned to the supplier or material cut by the customer will not be returned for credit.	
Reviewed by Authorized Castle Metals Representative:	Signature:  Name: Sue Kalous
	Date: AUG 15 2018



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

## PURCHASE ORDER PO040612

**Supplier:** MEC002-VU  
Metaux Castle  
P.O. Box 4090 Stn A  
Toronto  
ON  
M5W OE9 Canada

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**PO No:** PO040612

**PO Date:** 7/26/18

**Due Date:** 8/24/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
clavoie@dartaero.com

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:**

### Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
4		M7075T6S1.750X2.250		7075-T6 Sheet 1.750" X 2.250" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/24/18	43.75 ft	0 ft	44 ft	\$40.86/ft	\$1,787.63
Line Item Note 20 pc - 48.25" long												
5		M7075T6S1.250X2.750		M7075T6S1.250" X2.750" Cut From Plate : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/24/18	12 ft	0 ft	12 ft	\$31.20/ft	\$374.40
6		M7075T6S0.375X3.000		7075 T6 Sheet 0.375" X 3.000" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209	Firmed	-	8/24/18	60 ft	0 ft	60 ft	\$11.86/ft	\$711.60
7		M7075T6S0.750X4.000		7075 T6 Sheet 0.750" X 4.000" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209	Firmed	-	8/24/18	40 ft	0 ft	40 ft	\$28.58/ft	\$1,143.20

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
8		M7075T6S1.000X1.250		7075 T6 Sheet 1.000X1.250 : MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 receive ft	Firmed	-	8/24/18	12 ft	0 ft	12 ft	\$17.15/ft	\$205.80
13		M2024T3S.090		2024-T3 .090 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	-	8/24/18	144 sf	0 sf	144 sf	\$8.16/sf	\$1,175.04
19		M6061T6B2.000X08.000		6061-T6 Bar 2.00" X 8.00" ( Cut In 4Ft Section) : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/24/18	8 ft	0 ft	8 ft	\$56.83/ft	\$454.64
Line Item Note cut in section of 4 ft												
21		M7075T73B1.250X02.000		7075-T73 Bar 1.250" X 2.000" Cut In Billet 30" Long : MATERIAL: 7075-T73 OR 7075- T7351/T73510/T73511 BAR PER AMS-QQ-A- 200/11 OR AMS-QQ-A- 225/9 OR AMS 4124 OR AMS-QQ-A-250/12 OR AMS 4078 receive ft	Firmed	-	8/31/18	25 ft	0 ft	25 ft	\$26.10/ft	\$652.50
Line Item Note replacement mat'l for line 9, need RMA to send back mat'l												
Grand Total:												\$6,504.81

## Order Notes

## Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit  
[www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 8/17/18 8:19 AM dart.lavoie.chantal

## SHIP TO:

A M CASTLE METALS  
4175 ROYAL DRIVE, SUITE 600  
KENNESAW, GA 30144

# KAISER ALUMINUM

Trentwood Works

PO Box 15108, Spokane Valley WA 99215-5108

15000 E Euclid, Spokane Valley WA 99216

Phone: (800) 367-2586

## SOLD TO:

AM CASTLE & CO- SOLD TO  
1420 KENSINGTON RD  
SUITE 220  
OAK BROOK, IL 60523

## CERTIFIED TEST REPORT

Serial Number

4516759

CUSTOMER PO NUMBER: 467951-1	WORK PACKAGE:	CUSTOMER PART NUMBER: 770960	SHIP RUN/LOAD: 104317/25	GOV'T CONTRACT NUMBER:
KAISER ORDER NO: 1261507-1	SHIP DATE: 28-JUN-2018	ALLOY: 2024	CLAD: BARE	TEMPER: T3
WEIGHT SHIPPED: 3266 LB	QUANTITY: 52 PCS EST.	TRUCK B/L #: 2074594	GAUGE: 0.0900 IN ( 2.2860 MM)	PRODUCT DESCRIPTION: Kaiser Stretched
			DIAMETER/MDTH: 48.000 IN (1219.2 MM)	LENGTH: 144.000 IN (3657.6 MM)

MHU 2232174: LOT 269610B2: 15 pieces;

MHU 2238994: LOT 270096B1: 37 pieces;

## Certified Specifications

AMS 4037/RevQ  
CMMP 019/RevD

AMS-QQ-A-250/4/RevB  
CMMP 025/RevV

ASTM B 209/Rev14

Test Code: 1504

Lot: 269610B2 Cast 666

Drop 35

## Test Results

Ingot 2



Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	66.2 : 66.6 (456 : 459)	45.4 : 45.5 (313 : 314)	18.0 : 18.0

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.08	0.20	4.6	0.57	1.3	0.01	0.15	0.02	0.01	0.00	TOT 0.03
Lot: 270096B1	Cast 679	Drop 09				Ingot 2					Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	66.7 : 66.7 (460 : 460)	45.6 : 45.7 (314 : 315)	18.4 : 19.0

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.06	0.17	4.6	0.58	1.3	0.01	0.11	0.02	0.01	0.01	TOT 0.02



## CERTIFIED TEST REPORT

Serial Number  
4516759

Trentwood Works  
PO Box 15108, Spokane Valley WA 99215-5108  
15000 E Euclid, Spokane Valley WA 99216  
Phone: (800) 367-2586

### ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024												
MIN(wt%)	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

### ORDER COMMENTS

AMC A92024-155 R 6

### CERTIFICATION

Kaiser Aluminum, Trentwood Works, is ISO 9001, AS9100, and ISO 14001 certified, and hereby certifies that all material shipped under this order:

- \* has been inspected, tested, and found to be in conformance with the requirements of the specifications indicated herein.
- \* All test equipment and measuring devices are calibrated and certified in accordance applicable specifications. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. Reported elongation values have been measured as elongation at fracture.
- \* was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content.
- \* has been thermally processed in compliance with AMS 2772, where applicable.
- \* is mercury free, within the limits of detection of ASTM E1215 (<1 ppm).
- \* is in compliance with RoHS 2, European Union Directive 2011/65/EU.
- \* is in compliance with European Chemical Agency, ECHA, REACH regulations, (EC) No 1907/2006, and Kaiser regularly monitors these regulations for updates.
- \* is free of Conflict Minerals, as defined in Section 15.2 of the Dodd-Frank Act.
- \* is free of weld repair.
- \* meets the reporting requirements of EN10204, Type 3.1.

Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of the Kaiser Aluminum laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

Michael Peske, PT Lab Process Engineer

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 2024-T3 ALUMINUM SHEET  
SPECIFICATION: QQ-A-250/4 OR AMS-QQ-A-250/4  
OR AMS 4037  
OR ASTM B209  
PART NUMBER: M2024T3S XXX THK  
WHERE "XXX" = SHEET THICKNESS (IN INCHES)  
EG. 0.063" THICK SHEET = M2024T3S 063  
PREFERRED SIZE: XXX BY 4 FT BY 10 FT

RELEASED  
R 2009-03-23

B	REFORMAT DWG. ADD ASTM B209 SPEC (2N D8-1), PAR 09-020A	CP	09-07-07
A	NEW ISSUE	DS	01-09-24
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09-07-07		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M2024T3S			
TITLE 2024-T3 SHEET SPEC			
REV. B SHEET 1 OF 1			
SCALE NTS			
COPYRIGHT © 2009 BY DART AEROSPACE LTD			

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M2024 T35 .040  
 DATE: 18/08/17

PO / BATCH NO.: P0040612/S103237

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 144sf  
 QUANTITY INSPECTED: 144sf  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.090"  
 THICKNESS RECEIVED: 0.090"  
 SHEET SIZE ORDERED: 4x12'  
 SHEET SIZE RECEIVED: 4x12'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y N	
CORROSION	Y <input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y N	AMS QQ-A-250M
CORRECT THICKNESS	<input checked="" type="radio"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y N	HT: 269610B2
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>18/08/17</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in